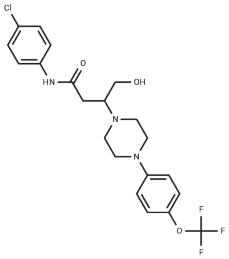
Data Sheet (Cat.No.T13287)

TargetMol
YOUR TARGET MOLECULES

VBIT-4

Chemical Properties



CAS No. : 2086257-77-2

Formula: C21H23ClF3N3O3

Molecular Weight: 457.87

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	VBIT-4 is a voltage-dependent anion channel 1 (VDAC1) oligomerization inhibitor (Kd: 17 μM). VBIT-4 can be used for therapeutic purposes in apoptosis-associated disorders (such as neurodegenerative and cardiovascular diseases).
Targets(IC50)	VDAC
In vitro	VBIT-4 targets the mitochondrial protein VDAC1, inhibits apoptosis and defends against mitochondrial dysfunction. VBIT-4 (0.1-10 μM) inhibits VDAC1 oligomerization, Cyto c release from mitochondria and apoptosis (in HEK-293 cells , IC50s of 1.9±0.08 μM, 1.8±0.24 μM, and 2.9±0.12 μM, respectively).VBIT-4 offer a therapeutic strategy for treating different diseases associated with enhanced apoptosis and point to VDAC1 as a promising target for therapeutic intervention.

Solubility Information

Solubility	DMSO: 45 mg/mL (98.28 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.184 mL	10.9201 mL	21.8403 mL
5 mM	0.4368 mL	2.184 mL	4.3681 mL
10 mM	0.2184 mL	1.092 mL	2.184 mL
50 mM	0.0437 mL	0.2184 mL	0.4368 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Ben-Hail D, et al. Novel Compounds Targeting the Mitochondrial Protein VDAC1 Inhibit Apoptosis and Protect against Mitochondrial Dysfunction. J Biol Chem. 2016 Nov 25;291(48):24986-25003.

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481